Mendocino County Department of Agriculture
Pesticide Use Enforcement
Work Plan
FY 06-07

Introduction

Mendocino County is a very large and geographically diverse county. Potter Valley, Redwood Valley, Hopland, Ukiah and Anderson Valley are the main agricultural growing regions excluding timber. The top crops are wine grapes, timber and pears. The types of pest control performed here are Structural Branch I, II and III, Landscape Maintenance Gardening, Field Fumigation, and Agricultural Production, which include Property Owner/Operators, Vineyard Management Companies and Agricultural Pest Control Operators. There are many small, owner-operated vineyards. There are several registered Pest Control Advisors, and a few Pesticide Dealers.

Resources

When fully staffed the department employs three Agricultural Biologist/Weights and Measures Specialists.

Inspectors work in both the Ag and Weights and Measures programs. One inspector spends the majority of her time managing the PUE program. The other two inspectors work primarily in other programs, but assist with the PUE program workload by issuing operator id numbers, giving exams, and reviewing pesticide use reports.

The assistant Commissioner also contributes work hours to the pue program by sharing in the investigations and handling phone calls and walk-ins on a regular basis.

The following table breaks down the percent of work hours that each inspector and the Assistant Commissioner contributed to the Pue program in FY 05-06:

PUE Program Manager/Inspector (1)	70%
Assistant Commissioner	25%
Inspector (2)	10%
Inspector (3)	5%

In March 2006, we lost the assistance of our Enforcement Branch Liason Larry Catton due to serious illness. Tom Anderson became our new EBL and participated in an illness investigation in June 2006. Tom was seriously injured in October 2006, and the remaining three EBLs were forced to take on the additional counties. We are now under the guidance of Jim McKee.

Near the end of FY 05-06, the department experienced two staff changes. The office manager position was vacant for June, July and August 2006. One of the inspector positions was vacated in August 2006 and will not be filled until December 2006. These changes have significantly increased the workload for the remaining staff for FY 06-07.

The department will not be fully staffed again until December 2006. At that time the new inspector will be training with the Pue program manager and will contribute 40% of her work hours to the PUE program.

The following table projects the percentage of work hours staff will contribute to the pue program for FY 06-07 starting in December 2006:

PUE program Manager/Inspector (1)	60%
Inspector (2)	40%
Assistant Commissioner	15%
Inspector (3)	5%

Although the department will be fully staffed in December 2006, the staff will still be limited given the time it will take to train the new inspector.

A. Restricted Materials Permitting

1. Permit Evaluation

Approximately 55 Restricted Materials Permits are issued annually.

The number of valid permits for FY 05-06 is estimated at 111.

95% of permits are renewals for mainly perennial crops, while the other 5% of permits are for one time applications such as preplant soil fumigation

The majority of Restricted Materials Permits are issued for Paraquat, 2,4-D, Strychnine and Guthion:

Restricted Material	# of Valid Permits in FY 05-06
Paraquat	60
2,4-D	60
Strychnine	38
Guthion	20

Less than 10 permits each were issued for the following restricted materials: Telone, Zinc Phosphide, Nemacur, Lannate, Metam Sodium, Sec 18 Spinosad, Streptomycin, Checkmite +, Aluminum Phosphide, Dicamba, Botran Dust, Phostoxin, Methyl Bromide, Trimec, Diazinon and Carbaryl.

Approximately 52 Notices of Intent were logged in FY 05-06, excluding structural fumigation notices. A preapplication inspection was performed on 8 restricted material applications which makes up more than 15% of the logged NOI's.

Restricted Materials Permits are issued by any of the four licensed staff members.

A checklist is placed at the front of each permit file to document the issuing inspector's review of the permit.

Permits are issued to certified applicators only. Private applicator exam is administered when necessary, prior to permit issuance. Most private applicators renew with continuing education credits.

A Letter of Authorization from the property owner/operator is required in order to issue a permit to an applicant who is not the property owner/operator.

Permit expiration dates are matched to the expiration of the applicant's certification.

Once issued, the permit is valid for a maximum of three years.

A General Restricted Material Permit Condition form is attached to all permits.

Additional specific permit conditions are attached for use of 2, 4-D, Telone, Metam Sodium, Methyl Bromide, Paraquat and Nemacur.

The applicant must provide site maps indicating the location of all sensitive sites within ¼ mile of the application site.

Maps are reviewed and discussed with applicant regarding application methods, weather conditions at site, mitigation methods and other application related criteria.

Decision to issue permit is based on map, discussion with applicant's knowledge of the area, and conditions at the site.

Notice of intent requirement and procedure are explained to applicant.

If employees work as handlers and/or fieldworkers, the applicant is provided with training requirements and materials.

Blank use report forms are also provided to applicant.

a. Strengths

When fully staffed there are three licensed inspectors in addition to the Assistant Commissioner who are qualified to issue restricted materials permits.

The minimum 5% requirement for pre-application inspections of scheduled restricted material applications is met annually. In FY 05-06, 15% of the Notices of Intent received a pre-application inspection.

The majority of permits are renewals for perennial crops.

During FY 05-06, permit holders that had not used a restricted material for some time were asked to remove it from their permit. Many of these permits had only the one restricted material and therefore became operator identification numbers. This significantly reduced the number of operators with a restricted materials permit.

Vikane, Paraquat, Guthion, Strychnine and 2, 4-D are the five restricted materials used most often. These chemicals can be focused on in order to identify specific hazards they present when used in the county.

The restricted material permit checklist used during permit issuance aids the inspector in thoroughly reviewing the permit prior to issue.

Ability to greatly improve map quality and permit review process by set up and implementation of new GIS mapping software.

Section, township and range data accuracy has greatly improved due to the completion of the Ukiah, Hopland and Anderson Valley mapping project.

b. Weaknesses

Only 1/3 of the permits have been renewed using the checklist at this time. Approximately 2/3 of the permits still need to have the permittee information, sites and maps updated.

Restricted Materials Permits and Operator ID files are not kept separately.

Conversion of permits RMPP to GIS software will be a considerable amount of work that must be done over time because of lack of staff resources.

Appointments for permit issue/renewal are not required. Due to limited staff and time constraints it is difficult to thoroughly review permits when they are requested on a walk-in basis. The inspector reviewing the permit may primarly work in other programs and therefore may not be as familiar with restricted material permitting requirements as the PUE Program Manager or Assistant Commissioner.

c. Goal or Objective

To assure that the permit review process is thorough, and that all pertinent information is collected and documented prior to issuance of permit. To utilize the entire process, including the NOI to assure that restricted material applications are made in a manner that

complies with all applicable laws and regulations, while eliminating potentioal for damage to the environment, the public's health, andf those involved in the applicatiom.

d. Deliverables

Restricted Material Permit files will be moved and kept separate from Operator ID files prior to the permitting season of FY 06-07. Implement immediately.

The RMP checklist will be used to update another 1/3 of the permits upon renewal in FY 06-07. The final 1/3 of permits will be updated in FY 07-08.

December 2006: Formulate a plan for the transition from RMPP to GIS based permitting.

January 2007: Implement Phase 1 of GIS plan. Complete Phase 1 by end FY 06-07.

Require permit holders to make an appointment for renewing their restricted material permit in order to provide the inspector with adequate time for a thorough review and update of the permit. In early December 2006, a letter will be sent to all operators with permits expiring in 2006 to notify them of this requirement.

New restricted material permit applicants will also need to make an appointment to allow for adequate review of the new permit application and private applicator certification if needed. Walk-ins will continue to be helped as time allows. After a preliminary assessment of the applicant's needs, an appointment will be scheduled for the permit issuance and/or PAC exam if more time is needed.

Continue to identify permits with materials that have not been used and work to have them removed by permittee.

e. Measure of Success

Review new and renewed Restricted Materials permit files in March 2007. Check for use of checklist and thorough review and update of permit prior to issuance. Upon completion of the permitting season of 2007, 2/3 of the total restricted materials permits should be thoroughly updated and reviewed including the use of the checklist.

In December 2006 a plan for the RMPP transition to GIS based permitting will have been formed that specifies work to be completed by the end of FY 06-07.

At the end of FY 06-07, Phase 1 of the GIS plan will be reviewed to see if the work has been completed.

2. Site Monitoring Plan
Plan Development

There were approximately 1046 annual sites in FY 05-06, about 438 were forest/timberland sites.

NOIs received in FY 05-06 were for the following sites/crops and restricted materials:

Site/Crop	# of NOIs	Restricted Material Used	Seasonal Time of Use
Structural Fumigation	Approximately 156	Sulfuryl Fluoride	All Year
Wine Grapes	12	Paraquat 10, Strychnine 2	February – July
Apples	10	Guthion	May – July
Turf/Sod	5	Dicamba 5, Carbaryl 4	April – August
Pears	6	Guthion 3, Paraquat 2, (2,4-D) 1	May – June, September, February
Peas, Potatoes, Beans	5	Lannate	July – October
Preplant Soil Fumigation	5	Telone	September – November
Forest/Timberland	4	2, 4-D	May – June
Olive	3	Spinosad	September - October
Pasture	1	2, 4-D	April

Sites to be monitored are based on the following criteria:
Pesticide used and application method
Location in regard to sensitive sites
Owner/Operator compliance history
Employees as handlers
Staff availability

NOIs are received by phone, answering machine, fax or in person. Staff person receiving NOI takes down the information and gives the NOI to the PUE program manager or Assistant Commissioner. The NOI is recorded in the NOI log when it is reviewed. NOI is initialed to indicate approval.

Preapplication inspections are performed on all ag fumigations, and on other NOIs as staffing allows.
The total of pre-application inspections performed is periodically checked against the 5% of NOI requirement.

a. Strengths

Excluding structural NOIs, the 55 NOIs received in FY 05-06 was a low number.

Only 9 different restricted materials were used in 9 different crops/sites.

Majority of NOIs were for Guthion, Paraquat, 2,4-D, Lannate, Telone and Dicamba.

NOIs were mostly for wine grape, pear, apple, turf/sod, miscellaneous vegetable and forest sites.

Most sites are planted to perennial crops. Minimal cropping pattern and/or adjacent environment changes to monitor.

Completed portions of mapping project are used as reference in NOI review/approval process and pre-application inspection.

A pre-application inspection is performed on all ag fumigations.

b. Weaknesses

No structural fumigation log to track number of NOIs for Vikane or methyl bromide.

NOI's are not placed 24 hours in advance or are left on answering machine after normal business hours. This often does not give inspector enough time to evaluate/approve the application, perform a preapplication inspection or a pesticide use inspection.

c. Goal or Objective

To assure that site monitoring for restricted material applications meets the criteria listed above, and utilizes our resources most effectively, for the purpose of protecting the public health, and the environment.

d. Deliverables

Continue to perform a pre-application inspection on all ag fumigations.

Create a log to track the number of structural fumigation NOIs.

Create new NOI log form to capture more information. In addition to the proposed restricted material application information, include name of person leaving NOI, time called, and how NOI was submitted, by phone, in person, answering machine, or fax. Two more check off boxes will be added: One for 24 hr in advance compliance and a second box for indicating that a preapplication inspection has been performed.

Permittees that fail to NOI a full 24 hours in advance will receive a Letter of Warning reminding them of the 24 hour requirement.

e. Measure of Success

End of FY 06-07, review NOI log 5% requirement

End of FY 06-07, review NOI log for compliance with 24 hr in advance compliance. Check to see if the changes made to NOI log improved ability to track compliance.

Improved compliance with the 24 hr in advance notice will also be measured by the inspector's ability to perform pre-application inspections based more on the site monitoring criteria than on the time allowed for inspection prior to application.

B. Compliance Monitoring

1. Comprehensive Inspection Plan

Evaluation
Inspections are mainly performed by the PUE program manager. The Assistant Commissioner contributes by performing some inspections.

Inspections are usually performed Monday through Friday during regular business hours. During the peak pesticide application time of late spring/ early summer, the PUE program manager also conducts early morning inspections from about 6 to 8 A.M. A few weekend inspections are done on ag fumigations and other targeted applications/operators.

The majority of inspections are done in February through August. This is the primary pesticide application season for apples, pears and wine grapes. The PUE program manager devotes 2 to 4 days per week to surveillance and inspections.

Structural fumigation inspections and record inspections are conducted throughout the year.

Inspections are performed in 5 different geographic regions: Hopland, Ukiah, Anderson Valley, Redwood Valley and Potter Valley.

When selecting a pesticide application to inspect, the PUE program manager considers several variables: Last time operator was inspected, Operators with employee handlers or fieldworkers, type of inspection, pesticide being applied, application/inspection site and operator's compliance history.

The following table presents inspection numbers and noncompliances for FY 05-06:

Type of Inspection	Work Plan Proposed #	# of Inspections Completed	% of Proposed Inspections Completed	Total # of Non-compliances (NCs)	# of Inspections with NCs	% of Inspections with NCs
Pre-Application Site	5% of NOIs	7	100	0	0	0
Fieldworker Safety	5	1	20	2	1	100
Pesticide Use Monitoring	30	18	60	24	11	61
Mix/Load (PUM)	15	5	33	6	4	80
Field Fumigation Use Monitoring	3	1	20	0	0	0
Structural – Branch 1 Use Monitoring	5	10	200	3	3	30
Structural – Branch 2 & 3 Use Monitoring	5	1	20	0	0	0
Production Ag/Other Pest Control Records	15	14	93	8	3	21
Dealer Records/Storage	2	1	50	3	1	100
Pest Control Advisor	5	2	67	0	0	0
Agricultural/Structural PCB Pest Control Records	5	2	67	1	1	50
Total	90	62	69	47	24	39

a. Strengths

b. Weaknesses

c. Goal or Objective

d. Deliverables

e. Measure of Success

2. Investigation Response and Reporting Improvement

Evaluation

a. Strengths

b. Weaknesses

c. Goal or Objective

d. Deliverables

e. Measure of Success

C. Enforcement Response

Enforcement Response Evaluation

a. Strength

b. Weaknesses

c. Goal or Objective

d. Deliverables

e. Measure of Success